

WHAT IS CLAIM IS:

1. An accumulating device for accumulating sheets or the like, which have differences in size, in a mixed state, comprising:

an information detecting portion, which is provided in a conveying passage for conveying sheets or the like, for detecting information pertaining to the length in the taking-in direction of sheets or the like;

a sheet or the like accumulating portion including an accumulating space portion for accumulating said sheets or the like, means for taking in the sheets or the like, which are taken from said conveying passage, in the accumulating space portion sheet by sheet, an accumulating stacker for accumulating sheets or the like taken in said accumulating space portion in the vertical direction, an accumulating stacker drive portion for driving to lower said accumulating stacker when taking in said sheets or the like, a tip end regulating wall for regulating the tip end in the taking-in direction of the sheets or the like having a maximum length in the taking-in direction of sheets or the like which are taken in, a rear end regulating wall for regulating the rear end in the taking-in direction of the sheets or the like to be taken in, at least one stopper that can advance and retreat between an advancement position at which the tip

end in the taking-in direction of sheets or the like, advancing from upward between the tip end regulating wall and the rear end regulating wall and being taken in, whose length in the taking-in direction of the sheets or the like is shorter than the maximum length and a retreating position where the sheets or the like retreat from the advancing position, a stopper supporting means for supporting the stopper so as to be movable in the vertical direction and simultaneously pressing the same in the downward direction, and changing the stopper to a state where the stopper advancing to its advanced position is brought into contact with the upper surface of accumulated sheets or the like in response to the length in the taking-in direction of the accumulated sheets or the like and the tip ends in the taking-in direction of the sheets or the like taken in while the upper surface thereof are being pressed are stopped, and a state where the stopper advances to the tip end side in the taking-in direction of the accumulated sheets or the like and the tip ends in the taking-in direction of sheets or the like taken in while the tip ends in the taking-in direction thereof are being stopped, and a stopper driving portion for driving the stopper to advance and retreat between the advanced position and retreated position of the stopper; and

a controlling portion for controlling said accumulating

stacker driving portion so that, when taking in said sheets or the like, the upper surface position of said accumulated sheets or the like is located at a constant height, and simultaneously controlling said stopper driving portion on the basis of detection of sheets or the like by said information detecting portion for detecting information pertaining to the length in the taking-in direction of sheets or the like.

2. The accumulating device as set forth in Claim 1, wherein sheets or the like are bank notes.

3. The accumulating device as set forth in Claim 1 or 2, further comprising at least one guiding member for swingably guiding the tip ends in the taking-in direction of sheets or the like taken in by the taking-in means onto the upper surface of the accumulated sheets or the like, wherein the tip ends in the taking-in direction of the sheets or the like guided by said at least one guiding member and moved on the upper surface of the accumulated sheets or the like is stopped by any one of the stopper and tip end regulating walls.

4. An accumulating device for accumulating bank notes, which have differences in size, in a mixed state, comprising:

a bank note identification portion, which is provided in a conveying passage for conveying bank notes, for identifying the denominations of the bank notes;

a bank note accumulating portion including an accumulation space in which said bank notes are accumulated, a taking-in and taking-out means for taking in bank notes, which are taken from said conveying passage, in said accumulation space portion, sheet by sheet and taking out the bank notes sheet by sheet as necessary, an accumulating stacker for accumulating bank notes taken in said accumulation space portion in the vertical direction, an accumulating stacker driving portion for driving to elevate and lower said accumulating stacker, a tip end regulating wall for regulating the tip end in the taking-in direction of the bank notes having a maximum length in the taking-in direction of bank notes which are taken in, a rear end regulating wall for regulating the rear end in the taking-in direction of the bank notes to be taken in, at least one stopper that can advance and retreat between an advancement position at which the tip end in the taking-in direction of bank notes, advancing from upward between the tip end regulating wall and the rear end regulating wall and being taken in, whose length in the taking-in direction of the bank notes is shorter than the maximum length and a retreating position where the bank notes retreat from the advancing position, a stopper supporting means for supporting the stopper so as to be movable in the vertical direction and simultaneously pressing the same in the

downward direction, and changing the stopper to a state where the stopper advancing to its advanced position is brought into contact with the upper surface of accumulated bank notes in response to the length in the taking-in direction of the accumulated bank notes and the tip ends in the taking-in direction of the bank notes taken in while the upper surface thereof are being pressed are stopped, and a state where the stopper advances to the tip end side in the taking-in direction of the accumulated bank notes and the tip ends in the taking-in direction of bank notes taken in while the tip ends in the taking-in direction thereof are being stopped, and a stopper driving portion for driving the stopper to advance and retreat between the advanced position and retreated position of the stopper;

a bank note arrival detecting portion, which is provided in said conveying passage, for detecting that bank notes identified by said bank note identification portion arrives in the vicinity of said bank note accumulating portion; and

a controlling portion for controlling said accumulating stacker driving portion so that, when taking in said bank notes, the upper surface position of said accumulated bank notes is located at a constant height, and simultaneously controlling said stopper driving portion on the basis of identification

of bank notes by said bank note identification portion and detection of bank notes by said bank note arrival detecting portion.

5. The accumulating device as set forth in Claim 4, wherein the retreat position of the stopper is made into the same position when taking in and taking out bank notes, and simultaneously is a position close to the tip end regulating wall outside the accumulating space.

6. The accumulating device as set forth in Claim 4, wherein the retreat position of the stopper is made into two positions differing from each other when taking in and taking out bank notes, and simultaneously the retreat position in taking out bank notes is greatly retreated from the retreat position in taking in bank notes and is outside the accumulating space.

7. The accumulating device as set forth in any one of Claims 4 through 6, wherein said tip end regulating wall is provided with an openable door through which the bank notes on the accumulating stacker can be collectively taken out.

8. A circulating type bank note depositing and dispensing machine capable of depositing and dispensing bank notes and circulatively using the deposited bank notes as dispensing bank notes, comprising the accumulating device, which is described in any one of Claims 4 through 6, in a temporary storage portion

for temporarily and collectively storing the deposited bank notes.

9. The circulating type bank note depositing and dispensing machine as set forth in Claim 8, wherein said tip end regulating wall of the accumulating device is provided with an openable door, temporarily stored bank notes are taken out from said accumulating space portion and received said conveying passage by the taking-in and taking-out means when the depositing is approved, and the temporarily stored bank notes are collectively taken out by opening said door when the depositing is not approved.